# List of Journals

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In this document, I have prepared a list of some high ranking statistics and statistics-adjacent journals along with their Aims and Scope. This list is not comprehensive.

## General Journals

#### JASA

- "Articles focus on statistical applications, theory, and methods throughout all disciplines that make use of data, including economic, social, biological, physical, engineering, and health sciences and the humanities."
- Would be under "Theory and Methods"; "Theory and Methods section publishes articles that make original contributions to the foundations, theoretical development, and methodology of statistics and probability"
  - \* "Authors are reminded that the *Journal of the American Statistical Association* is the flagship publication of the American Statistical Association. As such, it seeks to publish substantive articles that are likely to have broad impact on theory, methodology, and practice of statistical science. For this reason, shorter contributions or more narrowly focused contributions, while of considerable merit in their own right, may be inappropriate for the Theory and Methods."
- New England Journal of Statistics in Data Science
  - The aims of the journal are to serve as an interface between statistics and other disciplines in data science, to encourage researchers to exchange innovative ideas, and to promote data science methods to the general scientific community. The journal publishes high quality original research, novel applications, and timely review articles in all aspects of data science, including (but not limited to) all areas of statistical methodology, methods of machine learning, and artificial intelligence, novel algorithms, computational methods, data management and manipulation, applications of data science methods, among others. We encourage authors to submit collaborative work driven by real life problems posed by researchers, administrators, educators, or other stakeholders, and which require original and innovative solutions from data scientists.

#### • Bayesian Analysis

- Bayesian Analysis is an electronic journal of the International Society for Bayesian Analysis. It seeks to publish a wide range of articles that demonstrate or discuss Bayesian methods in some theoretical or applied context. The journal welcomes submissions involving presentation of new computational and statistical methods; critical reviews and discussions of existing approaches; historical perspectives; description of important scientific or policy application areas; case studies; and methods for experimental design, data collection, data sharing, or data mining.
- Statistics Sinica
  - Statistica Sinica aims to meet the needs of statisticians and data scientists in a rapidly changing world. It provides a forum for publishing innovative work of high quality in all areas of statistics and data science, including theory, methodology, and applications. The journal encourages the development and principled use of statistical methodologies relevant to society, science, and technology.
- Journal of Time Series Analysis

- During the last 30 years Time Series Analysis has become one of the most important and widely used branches of Mathematical Statistics. Its fields of application range from neurophysiology to astrophysics and it covers such well-known areas as economic forecasting, study of biological data, control systems, signal processing and communications and vibrations engineering.
- The Journal of Time Series Analysis started in 1980, has since become the leading journal in its field, publishing papers on both fundamental theory and applications, as well as review papers dealing with recent advances in major areas of the subject and short communications on theoretical developments. The editorial board consists of many of the world's leading experts in Time Series Analysis.

## Theoretical/Methodology-focused Journals

- JRSS Series B
  - "The objective of papers should be to contribute to the understanding of statistical methodology and/or to develop and improve statistical methods; any mathematical theory should be directed towards these aims... Also considered are comparisons, critical evaluations and new applications of existing methods, ..., statistical computation or simulation where original methodology is involved and original contributions to the foundations of statistical science."
  - "A paper, even if correct and well presented, is likely to be rejected if it only presents straightforward special cases of previously published work, if it is of mathematical interest only, if it is too long in relation to the importance of the new material that it contains or if it is dominated by computations or simulations of a routine nature."
- Biometrika
  - "emphasis is placed on papers containing original theoretical contributions of direct or potential value in applications"
- Journal of Multivariate Analysis
  - The journal welcomes contributions to all aspects of multivariate data analysis and modeling, including cluster analysis, discriminant analysis, factor analysis, and multidimensional continuous or discrete distribution theory.
  - Papers making substantial contributions to regression or time series analysis for multidimensional response variables are also invited. Submissions dealing with univariate models, including regression models with a single response variable and univariate time series models, are deemed to fall outside the journal's remit.
- Journal of Statistical Planning and Inference
  - The Journal of Statistical Planning and Inference offers itself as a multifaceted and all-inclusive bridge between classical aspects of statistics and probability, and the emerging interdisciplinary aspects that have a potential of revolutionizing the subject. While we maintain our traditional strength in statistical inference, design, classical probability, and large sample methods, we also have a far more inclusive and broadened scope to keep up with the new problems that confront us as statisticians, mathematicians, and scientists, such as clustering, post model selection inference, deep learning and random networks

## **Applied Journals**

- Sankhya B
  - Sankhya, Series B, primarily covers applied and interdisciplinary statistics including data sciences. Applied articles should preferably include analysis of original data of broad interest, novel applications of methodology and development of methods and techniques of immediate practical use. The Journal also welcomes submissions that expose potential applications to finance, insurance, economics, biology, physics, and general engineering & technology. Authoritative reviews and comprehensive discussion articles in areas of vigorous current research are also welcome.
- Journal of Applied Statistics
  - **Journal of Applied Statistics** is a world-leading journal which provides a forum for communication among statisticians and practitioners for judicious application of statistical principles and

- innovations of statistical methodology motivated by current and important real-world examples across a wide range of disciplines
- The editorial policy is to publish rigorous, clear and accessible papers on methods developed for real-life statistical problems, and which are anticipated to have a broad scientific impact. Purely theoretical papers are avoided but those on theoretical developments which clearly exhibit concrete applied potential may be considered. Papers demonstrating creative development of statistical techniques based on a true challenge in a subject area are strongly encouraged. The Journal publishes original research papers, review articles, and short application notes.
- In general, original research papers should present one or two challenges in an area, include relevant data, provide a novel method to solve challenges, and demonstrate that the proposed method has answered questions that were not properly or optimally addressed before by relevant existing methods.

#### • JABES

- "papers that introduce new statistical methods to solve practical problems in the agricultural sciences, the biological sciences (including biotechnology), and the environmental sciences (including those dealing with natural resources)... The journal does not normally publish papers that have a primary focus on human genetics, human health, or medical statistics."

#### • Annals of Statistics

- "Primary emphasis is placed on importance and originality, not on formalism. The journal aims to cover all areas of statistics, especially mathematical statistics and applied & interdisciplinary statistics."

### • Annals of Applied Statistics

— "We hope to publish papers that have substantive applied origins and involve relevant datasets, while also being of interest beyond the specific application. Papers that include innovative methodology brought to bear on scientific/policy questions and relevant data are especially welcome. Typically, a paper will be framed around one or more unresolved applied problems, where data are introduced to help address them. Data analyses should go well beyond numerical illustrations of calculations of proposed new methodology, with particular emphasis put on comparative analyses and substantive findings."

#### Software and Computation Journals

- Journal of Computational and Graphical Statistics
  - "The Journal of Computational and Graphical Statistics (JCGS) presents the very latest techniques on improving and extending the use of computational and graphical methods in statistics and data analysis. Established in 1992, this journal contains cutting-edge research, data, surveys, and more on numerical graphical displays and methods, and perception. Articles are written for readers who have a strong background in statistics but are not necessarily experts in computing."
- Journal of Statistical Computation and Simulation
  - Journal of Statistical Computation and Simulation (JSCS) publishes significant and original work in areas of statistics which are related to or dependent upon computation or simulation. Fields covered include computer algorithms related to statistics, studies in statistical inference by means of simulation techniques, and implementation of interactive statistical systems.
  - JSCS does not consider applications of statistics to other fields, except as illustrations of the use
    of the original statistics presented.

### • The R Journal

The R Journal is the peer-reviewed, open-access scientific journal, published by The R Foundation. It features short to medium length articles (up to 20 pages) covering topics of interest to users and developers of R. For example, description and implementation details of R packages, surveys or reviews of R software related to a particular area, applications of R software or descriptions of teaching resources related to R.

### • Journal of Statistical Software

- Our mission statement covers the *scope* of our journal and the *type of papers* we aim to publish.

We kindly ask you to read trough this section to ensure your work fits our scope. The mission statement also shows how to prepare the *code* published alongside with the manuscript and our *copyright and costs* policy.

- In the information for authors you can find all the important information on how to prepare your work before submitting to our journal. This includes general requirements, instructions on software preparation and manuscript preparation and a link to a step-by-step guide for the online submission. The page also shows how the review process and publishing process is handled after the initial submission.

### **Biostatistics Journals**

- Biostatistics
  - "Biostatistics" is an online only journal publishing papers that develop innovative statistical methods with applications to the understanding of human health and disease, including basic biomedical sciences. Papers should focus on methods and applications. Introduction of original methodology should be grounded in substantive problems"
  - Should satisfy one of:
    - \* development of new stochastic models or statistical methodology clearly motivated by a substantive problem in health or biomedical sciences;
    - \* innovative application of statistical methodology to address a substantive problem in health or biomedical sciences:
- BMC Medical Research Methodology
  - BMC Medical Research Methodology is an open access journal publishing original peer-reviewed research articles in methodological approaches to healthcare research. Articles on the methodology of epidemiological research, clinical trials and meta-analysis/systematic review are particularly encouraged, as are empirical studies of the associations between choice of methodology and study outcomes. BMC Medical Research Methodology does not aim to publish articles describing scientific methods or techniques: these should be directed to the BMC journal covering the relevant biomedical subject area.
- Computational Statistics and Data Analysis
  - Computational Statistics and Data Analysis (CSDA), an Official Publication of the network Computational and Methodological Statistics (CMStatistics) and of the International Association for Statistical Computing (IASC), is an international journal dedicated to the dissemination of methodological research and applications in the areas of **computational statistics** and **data analysis**. The journal consists of four refereed sections which are divided into the following subject areas:
    - \* critical review of an area of statistical methodology relevant to health or biomedical science applications, with a focus on practical utility;
    - \* case studies based on important health or biomedical sciences data.
- Statistics in Medicine
  - The journal aims to influence practice in medicine and its associated sciences through the publication of papers on statistical and other quantitative methods. Papers will explain new methods and demonstrate their application, preferably through a substantive, real, motivating example or a comprehensive evaluation based on an illustrative example. Alternatively, papers will report on case-studies where creative use or technical generalizations of established methodology is directed towards a substantive application. Reviews of, and tutorials on, general topics relevant to the application of statistics to medicine will also be published. The main criteria for publication are appropriateness of the statistical methods to a particular medical problem and clarity of exposition. Papers with primarily mathematical content will be excluded. The journal aims to enhance communication between statisticians, clinicians and medical researchers.
- Bioinformatics
  - The leading journal in its field, Bioinformatics publishes the highest quality scientific papers and review articles of interest to academic and industrial researchers. Its main focus is on new developments in genome bioinformatics and computational biology. One distinct section within

the journal - *Application Notes* - focuses on shorter papers exploring the applications used for experiments.

- BMC Bioinformatics
  - BMC Bioinformatics is an open access, peer-reviewed journal that considers articles describing novel computational algorithms and software, models and tools, including statistical methods, machine learning and artificial intelligence, as well as systems biology.
- Statistical Methods in Medical Research
  - Statistical Methods in Medical Research is a highly ranked, peer reviewed scholarly journal and is the leading vehicle for articles in all the main areas of medical statistics and therefore an essential reference for all medical statisticians. It is particularly useful for medical researchers dealing with data and provides a key resource for medical and statistical libraries, as well as pharmaceutical companies.
  - This unique journal is devoted solely to statistics and medicine and aims to keep professionals abreast of the many powerful statistical methods now available to the medical profession. As new methods are constantly adopted by statisticians working both inside and outside the medical environment, this review journal aims to satisfy the increasing demand for accurate and up-to-the-minute information.

## Review and Commentary

- Statistical Science
  - The central purpose of Statistical Science is to convey the richness, breadth and unity of the field by presenting the full range of contemporary statistical thought at a moderate technical level, accessible to the wide community of practitioners, researchers and students of statistics and probability. It complements the main scientific journals of the IMS (the four series of the Annals) by coordinating, integrating and explicating important current statistical research. In line with this goal, the journal will publish reviews of influential new methodological and theoretical topics, articles describing substantive areas of scientific research with promising statistical applications, interviews with distinguished statisticians and probabilists, and articles on the history of statistics and probability.

## Discontinued

- Statistical Methodology
  - Discontinued
- The American Statistician